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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/337,667	06/22/99	SASAKI	Y Q54770

EXAMINER	
YOCKEY, D	
ART UNIT	PAPER NUMBER
2861	

DATE MAILED: 08/14/01

MM71/0814
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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No.	Applicant(s)	
	09/337,667	SASAKI ET AL.	
	Examiner	Art Unit	
	David Yockey	2861	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 April 2001 and 30 May 2001* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) *6-11, corresponding dependancies of claim 12, and 13-16* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5, corresponding dependencies of claim 12, and 17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☒ Notice of References Cited (PTO-892)
16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
18) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
19) ☐ Notice of Informal Patent Application (PTO-152)
20) ☐ Other: .

DETAILED ACTION

Election/Restrictions

Claims 6-11 and corresponding dependancies of claim 12 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 8.

Claims 13-16 remain withdrawn from consideration as being directed to a non-elected invention, the invention having been constructively elected by original presentation as discussed in the Office Action mailed 23 October 2000 (Paper #6).

Claim Objections

Claim 17 is objected to because of the following informalities: recitation that the cushion layer "is formed between the surface of the recording paper and the image receiving layer" is unduly redundant, as this entire recitation is provided in claim 2 upon which claim 17 depends; deletion of "is formed between the surface of the recording paper and the image receiving layer and" from claim 17 is respectfully recommended. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 12/1, 12/2/1, 12/3/1, 12/4/3/1 and 12/5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recitation "An image recording method for recording an image by use of the image recording method as set forth in any one of claims 1 to 11" is unduly redundant an confusing in that it is not clear what the difference is between an image recording method and an image recording method containing an image recording method. It is respectfully recommended that "by use of the image recording method" be deleted from the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 3, 12/1 and 12/3/1 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takanashi et al. (US 4527171) in view of Michelson (US 6,204,874 B1).

Takanashi et al. teaches the claimed invention except the tonor sheet, provided as a cut sheet form, being wound onto a surface of the image receiving layer.

Michelson discloses use of tonor sheets (referred to by Michelson as "donor sheets"), provided as a cut sheet form, in place of a roll, wherein a tonor sheet is wound onto a recording paper. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute tonor sheets, provided as a cut sheet form, for the roll in the Takanashi et al. apparatus, wherein the tonor sheets are wound onto the recording paper and thus onto the image receiving layer thereon, because such substitution would overcome the various disadvantages of roll media detailed by Michelson (see column 1, lines 44-65), thereby providing greater flexibility in providing desired colors and reducing operating cost through reduced media cost as a consequence of increased manufacturing yield.

Claims 2, 4-5, 12/2/1, 12/4/3/1 and 12/5/1 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takanashi et al. (US 4527171) in view of Michelson (US

6,204,874 B1) as applied to claims 1 and 3 above, and further in view of Fujimura et al. (US 5,397,763).

Takanashi et al. in view of Michelson teaches the claimed invention except the cushion layer and the protective layer being formed as claimed.

Fujimura et al. teaches formation of a cushion layer formed between the surface of the recording paper and the image receiving layer in physical contact with the surface of the recording paper (column 7, line 45 through column 8, line 11; see in particular column 7, lines 48-52, which indicate the physical contact by endowing the cushion layer with adhesiveness instead of providing an adhesive layer). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a cushion layer on the outer layer side of the image receiving layer 4b on thermal binder transfer sheet 4 in Takanashi et al. for the purpose of improving sharpness of the transferred image.

Fujimura et al. further teaches provision of a protective layer on a transferred image to protect the image from damage (column 10, lines 62-66; column 11, line 58 through column 12, line 9). It would have been obvious to one of ordinary skill in the art at the time the invention was made to form a protective layer on the image recorded surface in Takanashi et al. for the purpose of protect the transferred image from damage.

Claims 2 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takanashi et al. (US 4527171) in view of Michelson (US 6,204,874 B1) as applied to claim 1 above, and further in view of Koguchi et al. (US 5,300,398).

Takanashi et al. in view of Michelson suggest the claimed invention except the cushion layer which is in physical contact with an entire surface of the recording paper on at least one side.

Koguchi et al. suggests providing a cushion layer 28 between the surface of a recording paper 26 and an image receiving layer 16 and suggests in Figs. 3A-3D that the cushion layer is in physical contact with an entire surface of the recording paper on at least one side, to confine any dust or dirt that may be present at the interface between the image receiving layer and the colorant layer (tonor layer on the tonor sheet). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a cushion layer between the surface of the recording paper and an image receiving layer and in physical contact with an entire surface of the recording paper on at least one side in the modified Takanashi et al. method because such provision would enable confining any dust or dirt that may be present at the interface between the image receiving layer and the colorant layer and thereby improve image quality.

Response to Arguments

Applicants' arguments filed 23 April 2001 and 30 May 2001 have been fully considered but they are not persuasive.

Applicants argue that the invention of claim 1 differs from the prior art because the Takanashi tonor supply is provided in a continuous roll form rather than in cut sheet form. This argument is not deemed to be persuasive and is deemed to be fully addressed by the new ground of rejection in view of Michelson, which provides suggestion for substituting cut sheets for a roll in supply of tonor.

Applicants argure that the invention of claim 17 differs from the combination of Takanashi and Fujimura because the prior art teaches only partial disposition of the cushion layer rather than the cushion layer being iin physical contact with an entire surface of the recording paper on at least one side. This argument is not deemed to be persuasive and is deemed to be fully addressed by the new ground of rejection in view of Koguchi et al., which provides suggestion of the claimed cushion layer.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Yockey whose telephone number is (703) 308-3084. The examiner can normally be reached on all weekdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, N. Le can be reached on (703) 308-0750. The fax phone numbers for the organization where this application or proceeding is assigned are (703)305-3432 for regular communications and (703)305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

DAVID F. YOCKEY
PRIMARY EXAMINER

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August 8, 2001